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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,747	03/29/2004	Kazuo Kasai	11.002-AG	5489

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JUDGE & MURAKAMI IP ASSOCIATES
DOJIMIA BUILDING, 7TH FLOOR
6-8 NISHITEMMA 2-CHOME, KITA-KU
OSAKA-SHI, 530-0047
JAPAN

EXAMINER	
ZERVIGON, RUDY	
ART UNIT	**PAPER NUMBER**
1763	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/21/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/812,747	KASAI ET AL.	
	Examiner	Art Unit	
	Rudy Zervigon	1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) *1-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. This application contains claims 1-14 drawn to an invention nonelected with traverse in Paper No. March 22, 2006 . A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 19-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 19 recites the limitation "gas flow control means" There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii; Nobuo (US 5685942 A) in view of Kumihashi; Takao et al. (US 5368685 A). Ishii teaches a device (Figure 1,5; column 3; lines 28-50) for etching a silicon substrate, the device (Figure 1,5;

column 3; lines 28-50) comprising: an etching chamber (2/2a; Figure 1; column 5; lines 1-14) for housing silicon substrates (W; Figure 1; column 3; lines 28-50) to be etched; a base (4c; Figure 1; column 4; lines 37-43) on which the substrates (W; Figure 1; column 3; lines 28-50) are loaded, the base (4c; Figure 1; column 4; lines 37-43) disposed in a bottom location inside said etching chamber (2/2a; Figure 1; column 5; lines 1-14); a gas-supply unit (41,42; Figure 1; column 5; lines 13-17) including etching and protective-film-forming gas cylinders (41,42; Figure 1; column 5; lines 13-17) and mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17), said gas supply unit (41,42; Figure 1; column 5; lines 13-17) connected to the etching chamber (2/2a; Figure 1; column 5; lines 1-14) via gas-supply lines (36,43; Figure 1; column 5; lines 13-25) with said mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17) intervening; a pressure-reduction unit (52; Figure 3; column 5; lines 23-28) connected to said etching chamber (2/2a; Figure 1; column 5; lines 1-14) via an exhuast line (51; Figure 1,5; column 3; lines 28-50); a plasma generating unit (6+7; Figure 1; column 3; lines 50-58), including a coil (6; Figure 1; column 3; lines 50-58) disposed along the outer periphery of and opposing said etching chamber (2/2a; Figure 1; column 5; lines 1-14), and a first RF power supply (7; Figure 1; column 3; lines 50-58) for applying high-frequency power to said coil (6; Figure 1; column 3; lines 50-58), thereby to convert into plasma etching gas and protective-film-forming gas supplied into said etching chamber (2/2a; Figure 1; column 5; lines 1-14) by said gas-supply unit (41,42; Figure 1; column 5; lines 13-17); a second RF power supply (24; Figure 1; column 4; lines 37-43) for applying high-frequency power to said base (4c; Figure 1; column 4; lines 37-43); a gas flow controller (56; Figure 1; column 5; lines 35-40) connected to said mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17) in said gas-supply unit

(41,42; Figure 1; column 5; lines 13-17); a coil-power controller (56; Figure 1; column 5; lines 35-40) for controlling the power applied by said first RF power supply (7; Figure 1; column 3; lines 50-58) to said coil (6; Figure 1; column 3; lines 50-58) in said plasma generating unit (6+7; Figure 1; column 3; lines 50-58); a base power controller (56; Figure 1; column 5; lines 35-40) for controlling the power applied by said second RF power supply (24; Figure 1; column 4; lines 37-43) to said base (4c; Figure 1; column 4; lines 37-43) – claim 15

Ishii further teaches:

i. A device (Figure 1,5; column 3; lines 28-50) for etching a silicon substrate, the device (Figure 1,5; column 3; lines 28-50) comprising: an etching chamber (2/2a; Figure 1; column 5; lines 1-14) for housing silicon substrates (W; Figure 1; column 3; lines 28-50) to be etched; a base (4c; Figure 1; column 4; lines 37-43) on which the substrates (W; Figure 1; column 3; lines 28-50) are loaded, the base (4c; Figure 1; column 4; lines 37-43) disposed in a bottom location inside said etching chamber (2/2a; Figure 1; column 5; lines 1-14); a gas-supply unit (41,42; Figure 1; column 5; lines 13-17) including etching and protective-film-forming gas cylinders (41,42; Figure 1; column 5; lines 13-17) and mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17), said gas supply unit (41,42; Figure 1; column 5; lines 13-17) connected to the etching chamber (2/2a; Figure 1; column 5; lines 1-14) via gas-supply lines (36,43; Figure 1; column 5; lines 13-25) with said mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17) intervening; a pressure-reduction unit (52; Figure 3; column 5; lines 23-28) connected to said etching chamber (2/2a; Figure 1; column 5; lines 1-14) via an exhuast line (51; Figure 1,5; column 3; lines 28-50); a plasma generating unit (6+7; Figure 1; column 3;

lines 50-58), including a coil (6; Figure 1; column 3; lines 50-58) disposed along the outer periphery of and opposing said etching chamber (2/2a; Figure 1; column 5; lines 1-14), and a first RF power supply (7; Figure 1; column 3; lines 50-58) for applying high-frequency power to said coil (6; Figure 1; column 3; lines 50-58), thereby to convert into plasma etching gas and protective-film-forming gas supplied into said etching chamber (2/2a; Figure 1; column 5; lines 1-14) by said gas-supply unit (41,42; Figure 1; column 5; lines 13-17); a second RF power supply (24; Figure 1; column 4; lines 37-43) for applying high-frequency power to said base (4c; Figure 1; column 4; lines 37-43); a gas flow controller (56; Figure 1; column 5; lines 35-40) connected to said mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17) in said gas-supply unit (41,42; Figure 1; column 5; lines 13-17); a coil-power controller (56; Figure 1; column 5; lines 35-40) for controlling the power applied by said first RF power supply (7; Figure 1; column 3; lines 50-58) to said coil (6; Figure 1; column 3; lines 50-58) in said plasma generating unit (6+7; Figure 1; column 3; lines 50-58); a base power controller (56; Figure 1; column 5; lines 35-40) for controlling the power applied by said second RF power supply (24; Figure 1; column 4; lines 37-43) to said base (4c; Figure 1; column 4; lines 37-43) – claim 19

ii. A device (Figure 1,5; column 3; lines 28-50) for etching a silicon substrate, the device (Figure 1,5; column 3; lines 28-50) comprising: an etching chamber (2/2a; Figure 1; column 5; lines 1-14) for housing a silicon substrate to be etched; a base (4c; Figure 1; column 4; lines 37-43) on which the substrates (W; Figure 1; column 3; lines 28-50) are loaded, the base (4c; Figure 1; column 4; lines 37-43) disposed in a bottom location

inside said etching chamber (2/2a; Figure 1; column 5; lines 1-14); a gas-supply unit (41,42; Figure 1; column 5; lines 13-17) including etching and protective-film-forming gas cylinders (41,42; Figure 1; column 5; lines 13-17) and mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17), said gas supply unit (41,42; Figure 1; column 5; lines 13-17) connected to the etching chamber (2/2a; Figure 1; column 5; lines 1-14) via gas-supply lines (36,43; Figure 1; column 5; lines 13-25) with said mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17) intervening; a pressure-reduction unit (52; Figure 3; column 5; lines 23-28) connected to said etching chamber (2/2a; Figure 1; column 5; lines 1-14) via an exhuast line (51; Figure 1,5; column 3; lines 28-50); a plasma generating unit (6+7; Figure 1; column 3; lines 50-58), including a coil (6; Figure 1; column 3; lines 50-58) disposed along the outer periphery of and opposing said etching chamber (2/2a; Figure 1; column 5; lines 1-14), and a first RF power supply (7; Figure 1; column 3; lines 50-58) for applying high-frequency power to said coil (6; Figure 1; column 3; lines 50-58), thereby to convert into plasma etching gas and protective-film-forming gas supplied into said etching chamber (2/2a; Figure 1; column 5; lines 1-14) by said gas-supply unit (41,42; Figure 1; column 5; lines 13-17); a second RF power supply (24; Figure 1; column 4; lines 37-43) for applying high-frequency power to said base (4c; Figure 1; column 4; lines 37-43); a gas flow controller (56; Figure 1; column 5; lines 35-40) connected to said mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17) in said gas-supply unit (41,42; Figure 1; column 5; lines 13-17); a coil-power controller (56; Figure 1; column 5; lines 35-40) for controlling the power applied by said first RF power supply (7; Figure 1; column 3; lines 50-58) to said coil (6; Figure 1;

column 3; lines 50-58) in said plasma generating unit (6+7; Figure 1; column 3; lines 50-58) – claim 22

iii. A device (Figure 1,5; column 3; lines 28-50) for etching a silicon substrate, the device (Figure 1,5; column 3; lines 28-50) comprising: an etching chamber (2/2a; Figure 1; column 5; lines 1-14) for housing silicon substrates (W; Figure 1; column 3; lines 28-50) to be etched; a base (4c; Figure 1; column 4; lines 37-43) on which the substrates (W; Figure 1; column 3; lines 28-50) are loaded, the base (4c; Figure 1; column 4; lines 37-43) disposed in a bottom location inside said etching chamber (2/2a; Figure 1; column 5; lines 1-14); a gas-supply unit (41,42; Figure 1; column 5; lines 13-17) including etching and protective-film-forming gas cylinders (41,42; Figure 1; column 5; lines 13-17) and mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17), said gas-supply unit (41,42; Figure 1; column 5; lines 13-17) connected to the etching chamber (2/2a; Figure 1; column 5; lines 1-14) via gas-supply lines (36,43; Figure 1; column 5; lines 13-25) with said mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17) intervening; a pressure-reduction unit (52; Figure 3; column 5; lines 23-28) connected to said etching chamber (2/2a; Figure 1; column 5; lines 1-14) via an exhuast line (51; Figure 1,5; column 3; lines 28-50); a plasma generating unit (6+7; Figure 1; column 3; lines 50-58), including a coil (6; Figure 1; column 3; lines 50-58) disposed along the outer periphery of and opposing said etching chamber (2/2a; Figure 1; column 5; lines 1-14), and a first RF power supply (7; Figure 1; column 3; lines 50-58) for applying high-frequency power to said coil (6; Figure 1; column 3; lines 50-58), thereby to convert into plasma etching gas and protective-film-forming gas supplied into said etching chamber

(2/2a; Figure 1; column 5; lines 1-14) by said gas-supply unit (41,42; Figure 1; column 5; lines 13-17); a second RF power supply (24; Figure 1; column 4; lines 37-43) for applying high-frequency power to said base (4c; Figure 1; column 4; lines 37-43); a gas flow controller (56; Figure 1; column 5; lines 35-40) connected to said mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17) in said gas-supply unit (41,42; Figure 1; column 5; lines 13-17); a coil-power controller (56; Figure 1; column 5; lines 35-40) configured to control said first RF power supply (7; Figure 1; column 3; lines 50-58) to said coil (6; Figure 1; column 3; lines 50-58) in said plasma generating unit (6+7; Figure 1; column 3; lines 50-58); and a base power controller (56; Figure 1; column 5; lines 35-40) for controlling electrical power applied by said second RF power supply (24; Figure 1; column 4; lines 37-43) to said base (4c; Figure 1; column 4; lines 37-43) – claim 24

Ishii does not teach:

i. said gas flow controller (56; Figure 1; column 5; lines 35-40) configured to control said mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17) so that said gas-supply unit (41,42; Figure 1; column 5; lines 13-17) delivers the etching gas into said etching chamber (2/2a; Figure 1; column 5; lines 1-14) at an intermittent flow obeying a predetermined rectangular waveform varying between zero and a predetermined value, and delivers the protective-film-forming gas into said etching chamber (2/2a; Figure 1; column 5; lines 1-14) at a continuous flow – claim 15

ii. A silicon-substrate etching device (Figure 1,5; column 3; lines 28-50) according to claim 15, wherein said gas flow controller (56; Figure 1; column 5; lines 35-40) is further

configured to increase the volume of the protective-film-forming gas that said gas flow controller (56; Figure 1; column 5; lines 35-40) delivers said intermittent flow at which said gas flow controller (56; Figure 1; column 5; lines 35-40) delivers the etching gas is zero, and to decrease the volume of said protective-film-forming gas that said gas flow controller (56; Figure 1; column 5; lines 35-40) delivers when said intermittent flow at which said gas flow controller (56; Figure 1; column 5; lines 35-40) delivers the etching gas goes to the predetermined value, as claimed by claim 16

iii. A silicon-substrate etching device (Figure 1,5; column 3; lines 28-50) according to claim 15, wherein said base power controller (56; Figure 1; column 5; lines 35-40) is configured to control said second RF power supply (24; Figure 1; column 4; lines 37-43) to vary periodically the power said second RF power supply (24; Figure 1; column 4; lines 37-43) applies to said base (4c; Figure 1; column 4; lines 37-43), so that said RF power supply applies lower power to said base (4c; Figure 1; column 4; lines 37-43) when said intermittent flow at whcih said gas flow controller (56; Figure 1; column 5; lines 35-40) delivers the etching gas is zero and applies higher power to said base (4c; Figure 1; column 4; lines 37-43) when said intermittent flow at which said gas flow controller (56; Figure 1; column 5; lines 35-40) delivers the etching gas goes to the predetermined value, as claimed by claim 17

iv. A silicon-substrate etching device (Figure 1,5; column 3; lines 28-50) according to claim 15, wherein said coil-power controller (56; Figure 1; column 5; lines 35-40) is configured to control said first RF power supply (7; Figure 1; column 3; lines 50-58) to vary periodically the power said RF power supply applies to said coil (6; Figure 1; column 3;

lines 50-58) so that said first RF power supply (7; Figure 1; column 3; lines 50-58) applies lower power to said coil (6; Figure 1; column 3; lines 50-58) when said intermittent flow at which said gas flow controller (56; Figure 1; column 5; lines 35-40) delivers the etching gas goes to the predetermined value, as claimed by claim 18

v. said gas flow controller (56; Figure 1; column 5; lines 35-40) means (presumed to be deleted consistent with other amended claims, see 112 rejections above) configured to control said mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17) so that said gas-supply unit (41,42; Figure 1; column 5; lines 13-17) delivers the etching gas into said etching chamber (2/2a; Figure 1; column 5; lines 1-14) at a volume-variant flow obeying a first predetermined rectangular waveform, and delivers the protective-film-forming gas into said etching chamber (2/2a; Figure 1; column 5; lines 1-14) at a volume-variant flow obeying a second predetermined rectangular waveform whose phase is the inverse of that of said first predetermined rectangular waveform – claim 19

vi. A silicon-substrate etching device (Figure 1,5; column 3; lines 28-50) according to claim 19, wherein said base power controller (56; Figure 1; column 5; lines 35-40) is configured to control said second RF power supply (24; Figure 1; column 4; lines 37-43) applies to said base (4c; Figure 1; column 4; lines 37-43), during the troughs in the first predetermined rectangular waveform, as characterizing said volume-variant flow at which said gas flow controller (56; Figure 1; column 5; lines 35-40) delivers the etching gas and applies higher power to said base (4c; Figure 1; column 4; lines 37-43) during the peaks in the first predetermined rectangular waveform, as claimed by claim 20

vii. A silicon-substrate etching device (Figure 1,5; column 3; lines 28-50) according to claim 19, wherein said coil power controller (56; Figure 1; column 5; lines 35-40) is configured to control said first RF power supply (7; Figure 1; column 3; lines 50-58) to vary periodically the power said first RF power supply (7; Figure 1; column 3; lines 50-58) to applies to said coil (6; Figure 1; column 3; lines 50-58), so that said first RF power supply (7; Figure 1; column 3; lines 50-58) applies lower electrical power during the troughs in the first predetermined rectangular waveform, as characterizing said volume-variant flow at which said gas flow controller (56; Figure 1; column 5; lines 35-40) delivers the etching gas and applies higher power to said coil (6; Figure 1; column 3; lines 50-58) during the peaks in the first predetermined rectangular waveform, as claimed by claim 21

viii. said gas flow controller (56; Figure 1; column 5; lines 35-40) configured to control said mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17) so that said gas-supply unit (41,42; Figure 1; column 5; lines 13-17) delivers the etching gas into said etching chamber (2/2a; Figure 1; column 5; lines 1-14) at a first predetermined flow and delivers the protective-film-forming gas into said etching chamber (2/2a; Figure 1; column 5; lines 1-14) at a second predetermined flow; and a base power controller (56; Figure 1; column 5; lines 35-40) configured to control said second RF power supply (24; Figure 1; column 4; lines 37-43) to vary periodically the power said second RF power supply (24; Figure 1; column 4; lines 37-43) applies to said base (4c; Figure 1; column 4; lines 37-43) – claim 22

ix. A silicon-substrate etching device (Figure 1,5; column 3; lines 28-50) according to claim 22, wherein said coil power controller (56; Figure 1; column 5; lines 35-40) is configured to control said second RF power supply (24; Figure 1; column 4; lines 37-43) to vary periodically the power said first RF power supply (7; Figure 1; column 3; lines 50-58) applies to said coil (6; Figure 1; column 3; lines 50-58), as claimed by claim 23

x. said gas flow controller (56; Figure 1; column 5; lines 35-40) configured to control said mass-flow controllers (39, 40, 46, 47; Figure 1; column 5; lines 13-17) so that said gas-supply unit (41,42; Figure 1; column 5; lines 13-17) delivers the etching gas into said etching chamber (2/2a; Figure 1; column 5; lines 1-14) at a first predetermined flow, and delivers the protective-film-forming gas into said etching chamber (2/2a; Figure 1; column 5; lines 1-14) at a second predetermined flow – claim 24

Kumihashi teaches a plasma processing apparatus (Figure 1) including process control cyclic algorithms for processing gas injection and RF application (Figure 9, 10 column 17 – column 18).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for Ishii to optimize his controller (56; Figure 1; column 5; lines 35-40) as taught by Kumihashi.

Motivation for Ishii to optimize his controller (56; Figure 1; column 5; lines 35-40) as taught by Kumihashi is for improving throughput during processing as taught by Kumihashi (column 18; lines 30-40)

Response to Arguments

7. Applicant's arguments with respect to claims 15-24 have been considered but are moot in view of the new grounds of rejection.

Conclusion

8. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Rudy Zervigon whose telephone number is (571) 272-1442. The examiner can normally be reached on a Monday through Thursday schedule from 8am through 7pm. The official fax phone number for the 1763 art unit is (571) 273-8300. Any Inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Chemical and Materials Engineering art unit receptionist at (571) 272-1700. If the examiner can not be reached please contact the examiner's supervisor, Parviz Hassanzadeh, at (571) 272-1435.

Rudy Zervigon

12/19/6